

The remnants of Hurricane Ida made landfall as a tropical storm along the U.S. Gulf Coast (near the Alabama-Florida border) on Tuesday morning, November 10, 2009. Tropical Storm Ida weakened quickly after landfall and was soon absorbed by a frontal boundary advancing toward the southeast U.S. Coast. By Thursday morning, the remnant low was located near the North Carolina coastal waters. The interaction between this low and a strong high pressure system located over eastern Canada produced an intense pressure gradient over the mid-Atlantic region, including New Jersey and Delaware, which persisted for several tide cycles, from Thursday morning through most of Saturday.

Wind gusts up to 60 MPH were reported along the Delaware coast Thursday afternoon, with gusts up to 50 MPH reported along the southern New Jersey coast. A wind gust of 60 MPH was also reported at the Delaware Bay Buoy (44009), located 26 NM SE of Cape May. Even more impressive was the prolonged period of strong onshore winds (34 KT or greater) which persisted for more than 30 hours in some locations.

Location	Period of sustained	Peak Gust
	Winds >= 34 KT	
Sea Girt	31 Hours	38 KT
Harvey Cedars	32 Hours	47 KT
Atlantic City	40 Hours	46 KT
Lower Township	50 Hours	50 KT

The combination of the prolonged northeast flow, a long fetch, and the proximity of a new moon on November 16th, produced large wave heights and strong wave action at the shore. Severe beach erosion occurred along both the New Jersey and Delaware coasts. Moderate to severe tidal flooding also occurred along both the Atlantic coast and the back bays. Flooding on some barrier islands was worse on the bay side than on the ocean side because of the build-up of water between tide cycles. Heavy rain was confined to Delaware and sections of southern New Jersey where it exacerbated flooding problems in those areas.

Location	Highest Water Level (MLLW)	Departure	Date/Time
Lewes, DE	7.88 FT	+3.2 FT	624 AM Nov 13
Cape May, NJ	8.20 FT	+2.7 FT	536 AM Nov 13
Atlantic City, NJ	7.57 FT	+2.9 FT	412 AM Nov 13
Sandy Hook, NJ	7.88 FT	+2.3 FT	536 AM Nov 14